

REMARKS

This is a full and timely response to the Final Office Action sent electronically on June 20, 2008. Upon entry of the foregoing amendments, claims 1, 2, 5, 6, and 9-12 are pending in the application. Claims 1, 5 and 6 are amended. Claims 3, 4, 7 and 8 are canceled. Claim 12 is new. The subject matter of amended claim 1 and new claim 12 is supported in at least FIG. 4a and FIG. 5 and the related detailed description of Applicant's originally submitted specification. Accordingly, no new matter is added to the present application.

In view of the foregoing amendments and following remarks, reconsideration and allowance of the present application and pending claims are respectfully requested.

Drawings

A. Statement of the Objection

The drawings are objected to under 37 CFR 1.83(a) for allegedly failing to show every feature specified in the claims. Specifically, the Office Action indicates that the thermoelectric cooler on which the at least one first converter, the second converter and the optical WDM converter are mounted on must be shown in the drawings or the features canceled from the claims.

B. Discussion of the Objection

Applicant's claim 1, as amended, no longer includes a thermoelectric cooler. Accordingly, Applicant requests that the objection to the drawings be withdrawn.

Claim Rejections under 35 U.S.C. §103 – Claims 1 - 11

A. Statement of the Rejection

Claims 1, 3-5 and 9-11 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,432,874 to Muraguchi (hereafter *Muraguchi*) in view of U.S. Patent No. 6,374,021 to Nakanishi (hereafter *Nakanishi*) and U.S. Patent No. 6,252,726 to Verdiell (hereafter *Verdiell*.)

Claim 2 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Muraguchi, Nakanishi* and *Verdiell* as applied to claim 1, and in further view of U.S. Patent No. 5,710,652 to *Bloom et al.* (hereafter *Bloom*.)

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Muraguchi, Nakanishi* and *Verdiell* as applied to claims 1, 3, and 4, and in further view of U.S. Patent No. 5,589,684 to *Ventrudo et al.* (hereafter *Ventrudo*.)

Claim 8 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Muraguchi, Nakanishi, Verdiell* and *Ventrudo* as applied to claims 1, 3, 4, and 7 and in further view of U.S. Patent No. 5,329,394 to *Calvani et al.* (hereafter *Calvani*) and U.S. Patent No. 5,686,990 to *Laznicka* (hereafter *Laznicka*.)

B. Discussion of the Rejection

For a claim to be properly rejected under 35 U.S.C. § 103,

“[t]he PTO has the burden under section 103 to establish a *prima facie* case of obviousness. In order to make a proper *prima facie* case of obviousness the prior art references, when combined, must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicant’s disclosure.”

Each of Applicant’s claims 1, 2, 5, 6, and 9-11 includes at least one feature that is not disclosed, taught or suggested by the cited references, alone or in any combination.

1. Claims 1, 3-5 and 9-11

Applicant’s claims 3 and 4 are canceled. Consequently, the rejection of claims 3 and 4 is rendered moot.

Applicant’s claim 1, as amended, is directed to a system for converting first and second signals representative of payload and supervisory information, respectively, between an electrical format and a WDM aggregated optical format the system comprising a beam splitter aligned with an optical connector for conveying said first and said second signals in said WDM aggregated optical format. The

system further comprises “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.” At least this arrangement of elements is not disclosed by the proposed combination of *Muraguchi*, *Nakanishi* and *Verdiell*.

Regarding independent claim 1, without conceding the propriety of the asserted combination or whether one of ordinary skill would have been motivated to make the asserted combination for the alleged reasons, Applicant respectfully submits that the asserted combination does not disclose, teach or suggest at least the aforementioned features of claim 1.

Muraguchi is directed to a light signal transmitting apparatus having first and second terminals and two optical fibers for coupling the first and second terminals to one another. Light signals are transmitted to the first and second terminals in opposing directions. A multiplexer is used to combine information from a high-speed electrical signal and information from a low-speed electrical signal in a combined light signal in each of the first and second terminals. A demultiplexer is used to separate the light signal into two light signals before converting the light signals into the high-speed electrical signal and the low-speed electrical signal.

Muraguchi is entirely silent regarding a focusing element, an optical connector and an optical isolator.

Nakanishi is cited for its disclosure of a first converter (e.g., LD 169 in FIGs. 21 and 22) a second converter (e.g., PD 168 in FIGs. 21 and 22) and an optical WDM converter (e.g., the WDM filter 171 in FIGs. 21 and 22) sealed in a package (FIGs. 23-25). Office Action, pg. 3, last paragraph continued on pg. 4.

Nakanishi is entirely silent regarding the arrangement of “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.”

Verdiell is cited for its disclosure of an optoelectronic package for housing optoelectronic and/or optical components wherein the optoelectronic component is mounted on a thermoelectric cooler (Figure 2, the Peltier cooler 225). Office Action, pg. 5, lines 14-18.

Verdiell is entirely silent regarding the arrangement of “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.”

Consequently, the proposed combination of *Muraguchi*, *Nakanishi* and *Verdiell* fails to render Applicant’s independent claim 1, as amended, obvious because the claim includes elements arranged in a manner that is not disclosed, taught or suggested by the proposed combination. Accordingly, favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. §103(a) are respectfully requested.

Applicant’s dependent claims 5 and 9-11 are also allowable for at least the reason that claims 5 and 9-11 depend directly or indirectly from allowable independent claim 1. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (Citations omitted). Accordingly, favorable reconsideration and withdrawal of the rejection of dependent claims 5 and 9-11 under 35 U.S.C. §103(a) are respectfully requested.

2. Claim 2

Applicant’s dependent claim 2 depends directly from independent claim 1, which comprises “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.” At least this arrangement of features is not disclosed by the proposed combination of *Muraguchi*, *Nakanishi*, *Verdiell* and *Bloom*.

Without conceding the propriety of the asserted combination, Applicant respectfully submits that the combination does not disclose at least the aforementioned features of claim 2, for at least the following reason.

As shown above, the combination of *Muraguchi*, *Nakanishi*, and *Verdiell* is entirely silent regarding “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.” *Bloom* is cited for its disclosure of “processing electronics being integrated to said single self-contained module (Figure 3 and Figure 4, the laser drive electronics or power supply PS is within the single

self-contained module Figure 3, column 2 line 22-25 and column 3 line 25-26).” Office Action, pg. 11, line 21 to pg. 12, line 2.

However, Figure 3 and Figure 4 of *Bloom* do not show, and the cited portions of *Bloom* are entirely silent regarding “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.”

Consequently, the proposed combination of *Muraguchi*, *Nakanishi*, *Verdiell* and *Bloom* fails to render Applicant’s dependent claim 2 obvious because the claim includes features arranged in a manner that is not disclosed, taught or suggested by the proposed combination. Accordingly, favorable reconsideration and withdrawal of the rejection of dependent claim 2 under 35 U.S.C. §103(a) are respectfully requested.

3. Claims 6 and 7

Applicant’s dependent claims 6 and 7 depend indirectly from independent claim 1, which includes “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.” At least this arrangement of features is not disclosed by the proposed combination of *Muraguchi*, *Nakanishi*, *Verdiell* and *Ventrudo*.

Without conceding the propriety of the asserted combination, Applicant respectfully submits that the asserted combination does not disclose at least the aforementioned features of claims 6 and 7, for at least the following reason.

As shown above, the combination of *Muraguchi*, *Nakanishi*, and *Verdiell* is entirely silent regarding “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.” *Ventrudo* is cited for its disclosure of “a further focusing element (21 in Figure 1) interposed between said beam splitter and said optical connector for focusing onto said optical connector optical radiation propagating from said beam splitter.” Office Action, pg. 13, first paragraph.

Ventrudo does not remedy the failure of *Muraguchi*, *Nakanishi*, and *Verdiell* to disclose, teach or suggest “a first focusing element interposed between said beam

splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element,” for at least the reason that *Ventrudo* does not disclose an optical isolator interposed between a beam splitter and a focusing element.

Consequently, the proposed combination of *Muraguchi*, *Nakanishi*, *Verdiell* and *Ventrudo* fails to render Applicant’s dependent claims 6 and 7 obvious because the claims include at least one feature that is not disclosed, taught or suggested by the proposed combination. *In re Fine, supra*. Accordingly, favorable reconsideration and withdrawal of the rejection of dependent claims 6 and 7 under 35 U.S.C. §103(a) are respectfully requested.

5. Claim 8

Applicant’s dependent claim 8 depends indirectly from independent claim 1, which comprises “a first focusing element interposed between said beam splitter and said optical connector and an optical isolator interposed between said beam splitter and said first focusing element.” At least this arrangement of features is not disclosed by the proposed combination of *Muraguchi*, *Nakanishi*, *Verdiell*, *Ventrudo*, *Calvani* and *Laznicka*.

Without conceding the propriety of the asserted combination, Applicant respectfully submits that the asserted combination does not disclose at least the aforementioned features of claim 8, for at least the following reason.

Calvani is cited for its disclosure of “an optical isolator (9, 209, 210 in Figure 2) prevent the rays reflected by the mirror or the plate et al from re-entering lasers (column 4 line 33-34).” Office Action, pg. 12, second paragraph.

Laznicka is cited for its disclosure of “an optical isolator (e.g., 39 in Figure 3) interposed between said beam splitter (37 in Figure 2) and said further focusing element (41 in Figure 3).

Calvani and *Laznicka* do not remedy the failure of *Muraguchi*, *Nakanishi*, *Verdiell* and *Ventrudo* to disclose, teach or suggest “an optical isolator interposed between said beam splitter and said first focusing element.”

Consequently, the proposed combination of *Muraguchi*, *Nakanishi*, *Verdiell*, *Ventrudo*, *Calvani* and *Laznicka* fails to render Applicant’s dependent claim 8

obvious because the claim includes at least one feature that is not disclosed, taught or suggested by the proposed combination. *In re Fine, supra*. Accordingly, favorable reconsideration and withdrawal of the rejection of dependent claim 8 under 35 U.S.C. §103(a) are respectfully requested.

New Claim

Claim 12 depends indirectly from allowable independent claim 1. Accordingly, new claim 12 is allowable for at least that reason that the claim includes all the features of an allowable independent claim. *In re Fine, supra*.

CONCLUSION

For at least the reasons set forth above, Applicant respectfully submits that pending claims 1, 2, 5, 6 and 9-12 are allowable over the cited art of record and the present application is in condition for allowance. Accordingly, a Notice of Allowance is respectfully solicited. Should the Examiner have any comments regarding the Applicant's response, Applicant requests that the Examiner telephone Applicant's undersigned attorney.

Respectfully submitted,

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